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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/679,311	10/07/2003	Sheng-Tsung Wang	MR957-1404	3218

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EXAMINER

SUHOL, DMITRY

ART UNIT PAPER NUMBER

3725

DATE MAILED: 09/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary****Application No.**

10/679,311

**Applicant(s)**

WANG, SHENG-TSUNG

**Examiner**

Dmitry Suhol

**Art Unit**

3725

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --****Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
     Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
     Paper No(s)/Mail Date \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 3, there is no antecedent basis for "the output shaft".

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang '310 in view of Morgenthaler et al (EP 0446819 A2). Wang discloses an actuating mechanism containing most of the claimed elements including with reference to claims 1 and 3, a power source (col. 2, lines 63-65), a transmission for passing movement (figure 2) including a planetary gear set (242) having a sun gear (3) fixedly disposed in the front portion of the pipe bender (col. 3, line 1), a central shaft for connection to the power source (2 and col. 2, lines 40-42), an actuating shaft being in the planetary gear

set (shaft 4 including portion 41), planetary pinions (242) rotatable on respective shafts (232) figures 2-3, the planet pinions engaged with both the central shaft and the inner toothed portion of the sun gear (figures 2-3).

Although Wang discloses most of the claimed elements, the reference fails to teach a crown gear connected with the lower end of the central shaft and an actuating pinion securely connected with an output shaft of the power source and engaged with the crown gear as required by claims 1 and 3. However, Morgenthaler discloses a pipe bending machine which teaches that it is known to manufacture such a machine with a connection between a motor (40) and a transmission for a pipe bender through the use of a crown gear (44) and associated pinion (45) (see figure 2). Therefore it would have been obvious to one having ordinary skill in the art, at the time of the claimed invention, to manufacture the device of Wang with such a connection means between the motor and transmission for the purpose of providing a durable and reliable power transfer linkage, especially since Wang clearly states in col. 2, lines 63+ that his central shaft portion 42 may be provided with a gear which engages other gears of the power source.

Regarding claim 2, the use a particular type of motor (e.g. a gear reduction motor) would have been obvious since it would only depend on the desired RPMs, torque of the motor and the desired power drawn of the motor.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wang '310 and Morgenthaler et al (EP 0446819 A2), as stated above, and further in view of applicants own admission. Wang, as modified by Morgenthaler, discloses most of the

claimed elements as stated above but for the specifics of the power source as claimed, however applicants clearly show in figure 6 that a power source with all of the claimed elements is known to be used with a pipe bending machine in the prior art (see figure 6). Therefore it would have been obvious to utilize the power source with all of the claimed features in the device of Wang, as modified by Morgenthaler, for the purpose of supplying an appropriate amount of power/torque to the device at the desired power draw.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Suhol whose telephone number is 571-272-4430. The examiner can normally be reached on Mon - Friday 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached on (571) 272-4419. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit: 3725

A handwritten signature in black ink, appearing to read "D. Suhol". The signature is stylized with a large, looped initial "D" and a cursive "Suhol".

Dmitry Suhol  
Examiner  
Art Unit 3725

ds